Overview of RUNWAY SAFETY REGIONAL SUMMIT

APRIL 25, 2001

Carolyn Blum, Regional Administrator opened the Summit by welcoming everyone. She provided the group with current information. Security Division is now a player in runway safety as many runway incursion (RI) issues involve access to the airport. The new National Runway Safety Director is Bill Davis. Mr. Davis is also a pilot.

Mike Lens, System Safety Specialist, National Runway Safety Program - There were 429 runway incursions (RI) during CY 2000, with Pilot Deviations leading the category. Pilot Deviations for that period occurred within the following categories: General Aviation - 76%, Commercial Aviation - 23%, Other - 1%. Within ASO, FXE is in the top number of airports with the most RIs. They currently have 10 RIs. Annually nationwide, there are 68 million operations, within which 400 RIs occurs.

As a result of feedback from the 2000 Summits, it was recommended and accepted that RIs needed to be placed into another context. A system was needed to describe clearer picture of incursion collision risk. A team in Washington has been working to categorize the last 4 years, CY 1997 –2000 RI data one at a time. The total number of RIs for that period was 1350 incursions. Developed four risk categories to identify each RI.

Collision Risk Assessment developed for R.I.s

- Events are categorized A-D
 - A barely avoid a collision
 - B Significant potential for a collision existed
 - C Time and distance exist to avoid a potential collision

 During CY 2000, there were 148 R.I. in the C category, of which 25 where in ASO
 - D Little or no risk of a collision
 During CY 2000, there were 213 R.I. in the D category, of which 32 where in ASO

Problems Identified in R.I.:

- -Language barriers
- -Mechanics taxiing aircraft
- -Last flight before a rwy change
- -Formation flights
- -ATC combined positions
- -Clearance Delivery on Ground Control
- -New tower where formerly there was none
- -Reduced visibility for flight crews and vehicle operators
- -Reduced visibility for Certified Professional Controllers (CPCs)

- -Failure to hold short of a parallel rwy
- -Anticipated/expected clearances

Aviation Safety Reporting System – Pilots, passengers, CPCs can file a report – reports go to and are compiled by NASA to investigate. This is a non-punitive process.

Headquarters plans to re-initiate the RI feedback process to gather information from pilots on their involvement in RI's.

Anna Cohen, Regional Runway Safety Program Manager, Southern Region – Reiterated concerns regarding the increase in reported RIs and the need to work collaboratively to develop a plan to reduce RIs. Supplied statistics for ASO in the A & B Runway Incursion category for CY 1997 – 2000: A category – 21 RI, B category - 25 RI.

Provided an update on the Regional Action Plan 2000, current status and initiatives implemented, as well as the current status of recommendations made during the 2000 Runway Safety Summit. Provided an overview of Southern region's Runway Safety Program, RI trends and statistics implemented and/or being developed toward reducing RIs.

Stan Zylowski (ATL), **Burt Willis** (DAB), Airport Management from Hartsfield, **James Stogner**, and Daytona Beach, **Jack Abbott**, spoke about their efforts at their respective airports to reduce/eliminate R.I.s

How ATL addressed RIs – Initiatives undertaken at ATL fall into one of two basic categories: Airfield enhancements and training & awareness. Some airfield enhancements include: double size hold lines; additional runway guard lights at priority and high use intersections; better signs; zipper markings for vehicles. Training and Awareness include: training for ramp movement vehicles; and recurrent training for driving on airport.

How DAB addressed RIs - Painted all movement areas; installed wigwag lights for intersections; 2 G/C's; establish std. taxi routes.

It takes commitment from everyone to eliminate RIs.

 $DAB - 3^{rd}$ busiest GA airport in USA

Embry Riddle Aeronautical University – 1400 student pilots

400 CFI

96 aircraft

3 FBO's

24 aircraft at PhilAir

20 aircraft at Commonwealth

42 aircraft at Phoenix

9 air carrier operations daily

Captain Robert Bragg – First Officer on the Pan-American Airlines flight who survived the 1977 ground collision in Tenerife.

Capt. Bragg spoke about the 1975 crash in BOS. The aircraft was within 40 miles of Gander New Finland when they experience maintenance problems. Operations instructed the crew to return to BOS. They over flew 12 airports back to BOS; crashed at BOS.

Spoke about the Cali crash:

In the glass cockpit, it is a 12 step procedure when issued a runway change to input new data. CPC asks if they want straight-in approach, Capt. says "yes". FO set in wrong data. Most SOPs instruct that once you plan and brief the approach, don't change; some airlines won't accept rwy change once on base leg; switching rwys at last minute and S turns on final are not always feasible; pilot has right to refuse any clearance that puts aircraft in jeopardy.

Spoke about Tenerife crash:

Sunday, 3/27/77, A charter flight LAX./NY./Tenerife; PanAm

At 12,000', CPC told flight to divert immediately and go to Tenerife (original destination was Las Palmas) due to terrorist bomb at Las Palmas and airport was closed. Numerous aircraft had diverted to Tenerife and the ramp was full; PanAm sat on ramp 3 hours; prior to PanAm departing, KLM (B747) was blocking PanAm and was refueling. This took 25minutes. PanAm back taxied down runway behind KLM for departure. As Clipper taxied down the runway, a fog bank rolled in and RVR reduced to 500 meters. This was below Clipper's minimums and they knew it would also be below KLM's for departure. They also knew KLM was on the runway ahead of them back taxiing but not in sight. Clipper heard KLM get a clearance but was not cleared for takeoff. Immediately thereafter, Capt. Bragg looks down runway and sees KLM moving towards them on departure. Clipper immediately attempts to get off the runway. KLM attempts to lift off over Clipper. After impact, Capt. Bragg looks up and realizes the upstairs lounge is gone along with the 28 passengers; the right wing is on fire; the top of the cockpit is gone along with the flight engineer's panel. Capt. Bragg jumps 28 feet to ground. 60 people are standing on the left wing attempting to get away with engines going wide open. Center fuel tank exploded. Capt. Bragg got the first crowd of people away. The ATCT calls to have the taxicabs in front of the airport drive out to both planes to get the injured. Tenerife Airport had one fire truck and one ambulance. KLM's 16 wheels were left in Clipper's fuselage and no one from row 31 and back got out of Clipper. Eight of 12 flight attendants killed. Average age of passengers 70 yrs. 65 passengers got out of plane but 8 later died. KLM pilot had been the public relations pilot for KLM. The FO had approximately 50 hrs. 747 time. The KLM cockpit voice recording indicates the KLM F.E. asked the captain if he was sure Clipper was off runway. KLM was short 20' in topping Clipper. All 285 dead on KLM.

Capt. Bragg then showed slides of the destruction. Tenerife was closed for 6 months. 605 dead.